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NOTES ON GEOGRAPHIC DISTRIBUTION

Mammalia, Chiroptera, Phyllostomidae, *Diaemus youngi*: First record for the state of Bahia, northeastern Brazil.

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Diaemus youngi is one of the three species of extant Neotropical hematophagous bats (Greenhall and Schutt Jr. 1996). Morphologically, it differs from the other two vampires in the lack of a calcaneum and a tail, and it also has white wing tips (Nowak 1994). Both sexes of this species possess cup-shaped scent glands located bilaterally inside the mouth, which emit an offensive odor (Greenhall and Schutt Jr. 1996). Its diet comprises mostly avian blood (Bredt et al. 1998).

The geographic distribution of the white-winged vampire bat ranges from northeastern Mexico to northern Argentina (Greenhall and Schutt Jr. 1996). The species has been recorded in all Brazilian biomes (Marinho-Filho and Sazima 1998), although there is an expressive gap of records in northeastern Brazil. Recently, Aguiar et al. (2006) reported the occurrence of this species in the Cerrado of Central Brazil and summarized the previous occurrence of *Diaemus youngi* in 12 Brazilian states. In the northeastern region, the species was recorded only to the states of Piauí, Pernambuco, and Alagoas. The present study reports the first occurrence of *D. youngi* in the state of Bahia, filling this gap in its geographical distribution (Figure 1).

A survey of bats was conducted in the counties of Canavieiras from 18 to 22 October 2005, and Mascote from 9 to 13 January 2006. The survey involved sporadic searches for diurnal roosts and captures of bats using mist nets (9 x 3 m) placed at ground level. The total netting effort was calculated following Straube and Bianconi (2002) as the product of the sampling area (216 m^2), the number of sampling hours per night (5), and the total number of netting nights (10), which amounted to 10,800 m^2.h, and resulted in 128 captures of 15 bat species. One adult male of *D. youngi* was collected at Fazenda São José in the municipality of Mascote (15°34'05" S, 39°17'07" W) on 12 January 2006, in the riparian forest on the left bank of the Jequitinhonha River (Figure 2). The individual captured was measured with a Mitutoyo Vernier caliper (150 mm ± 0.01) and weighed using a Pesola scale (100 g ± 0.5). In the laboratory the specimen was prepared in alcohol 70 % and deposited in the Alexandre Rodrigues Collection (DE606) at the Universidade Estadual de Santa Cruz, Ilhéus — Bahia. The specimen was sexually active, its forearm was 54.9 mm long, and its body mass was 45 g. Although these values are similar to previous reports (Nowak 1994; Bredt et al. 1998; Eisenberg and Redford 1999), they are considerably higher than those reported for specimens from French Guiana (Simmons and Voss 1996), and slightly higher than those reported from Bolivia, Central Brazil, Venezuela and Ecuador (Anderson 1997; Aguiar 2006; Greenhall and Schutt Jr. 1996; Pinto et al. 2007).

The occurrence of the white-winged vampire bat at Fazenda São José could be explained by the presence of poultry there, a common food source. Due to its rarity in the region and the fact that *D. youngi* feeds preferentially on birds (therefore it has a small role in the cycle of rabies), this species should not be considered in control programs of vampire bats, as previously suggested (Aguiar and Taddei 1995; Bredt et al. 1998).

The southern region of Bahia has been extensively sampled for bats so this single record obtained only now suggests that the species is rare in the region. A recent compilation of bat species occurring in southern Bahia (Faria et al. 2006), together with other bat surveys by the same author (unpublished data) totals approximately 7,200 captures of 60 bat species besides *D. youngi*. The capture of this individual of *D. youngi* increases to 79 the number of bat species in the state of Bahia.

Diaemus youngi is considered threatened of extinction in the states of Paraná (Margarido and Braga 2004) and Rio de Janeiro (Bergallo et al. 2000), and it should be considered in the red list of Bahia for its presumed low abundance.

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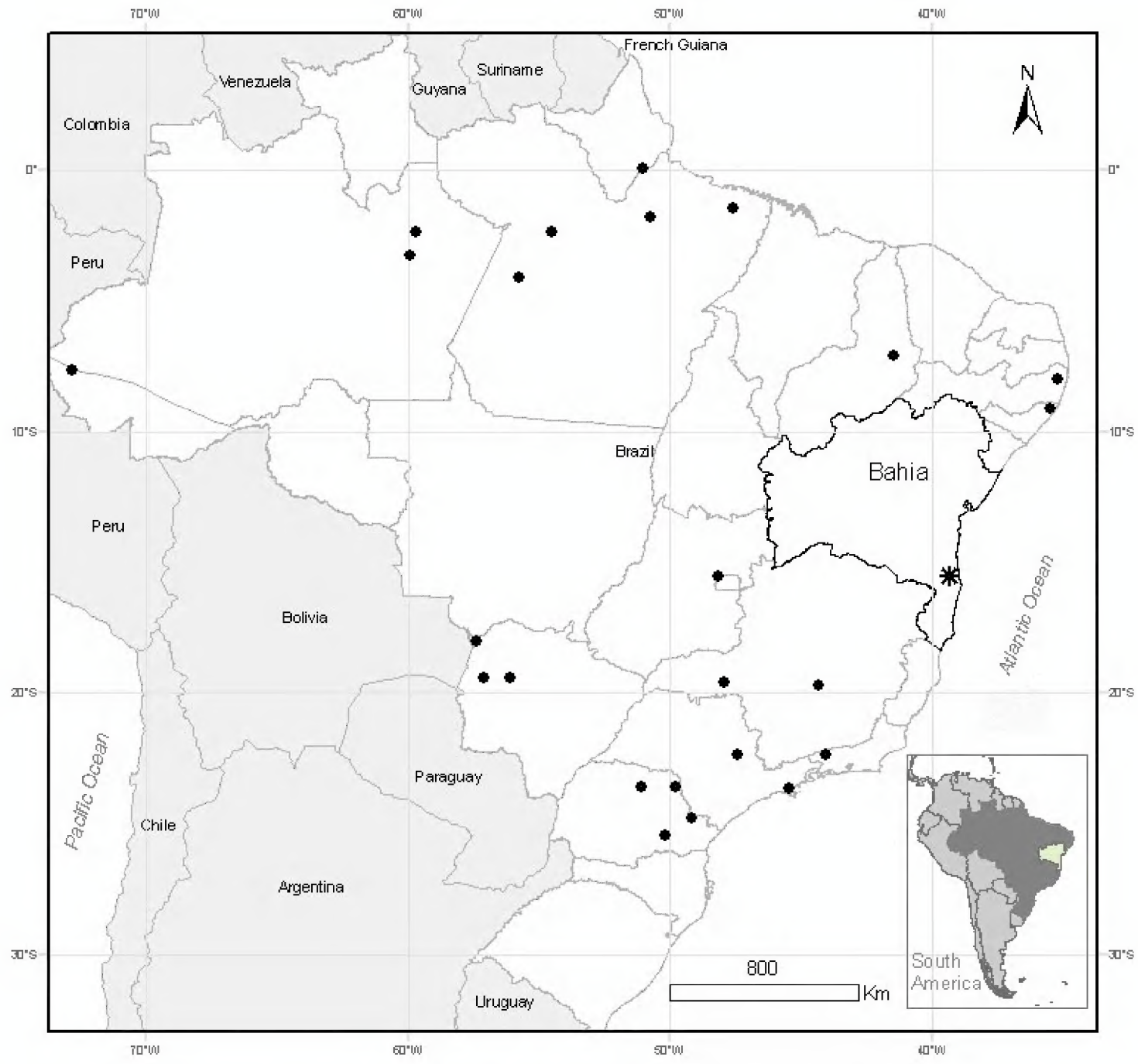

Figure 1. Localities where *Diaemus youngi* has been recorded (●) and the new record for the state of Bahia, northeastern Brazil (✱). Map adapted from Aguiar et al. (2006).

Figure 2. The white-winged vampire bat *Diaemus youngi* collected in Mascote, southern Bahia, Brazil.

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NOTES ON GEOGRAPHIC DISTRIBUTION

Literature cited

Aguiar, L. M. S. 2007. Subfamília Desmodontinae, p. 39-43 in: N. R. Reis, A. L. Peracchi, W. A. Pedro, and I. P. Lima (ed.). Morcegos do Brasil. Londrina, Universidade Estadual de Londrina.

Aguiar, L. M. S., W. R. Camargo, and A. S. Portella. 2006. Occurrence of white-winged vampire bat, *Diaemus youngi* (Mammalia, Chiroptera), in the Cerrado of Distrito Federal, Brazil. Revista Brasileira de Zoologia 23(3): 893–896.

Aguiar, L. M. S. and V. A. Taddei. 1995. Lista da Fauna Ameaçada de Extinção no Estado de Minas Gerais. Chiroptera Neotropical 1(2): 31.

Anderson, S. 1997. Mammals of Bolivia, taxonomy and distribution. Bulletin of the American Museum Natural History 231:1-652.

Bergallo, H. G., C. F. D. Rocha, M. A. S. Alves, and M. Van Sluys. 2000. A fauna ameaçada de extinção do Estado do Rio de Janeiro**.** Rio de Janeiro, Editora Universidade do Estado do Rio de Janeiro. 166 p.

Bredt, A., F. A. A. Araújo, J. Caetano Jr., M. G. R. Rodrigues, M. Yoshikawa, and M. M. S. Silva. 1998. Morcegos em áreas urbanas e rurais: manual de manejo e controle**.** Brasília, Fundação Nacional de Saúde. 117 p.

Eisenberg, J. F. and K. H. Redford. 1999. Mammals of the Neotropics. The Central Tropics, Vol. 3. Ecuador, Peru, Bolivia, Brazil. Chicago, The University of Chicago Press. 609 p.

Faria, D., B. Soares-Santos, and E. Sampaio. 2006. Bats from the Atlantic rainforest of southern Bahia, Brazil**.** Biota Neotropica 6(2): 1-13. Available at http://www.biotaneotropica.org.br/v6n2/pt/abstract?inventory+bn02406022006. Captured in July 2007.

Greenhall, A. M. and W. A. Schutt Jr. 1996. *Diaemus youngi*. Mammalian Species 533: 1-7.

Margarido, T. C. C. and F. C. Braga. 2004. Mamíferos, p. 27-142 in: S. B. Mikich and R. S. Bérnils (ed.). Livro vermelho da fauna ameaçada no Estado do Paraná. Curitiba, Instituto Ambiental do Paraná.

Marinho-Filho, J. S. and I. Sazima. 1998. Brazilian bats and conservation biology: a first survey, p. 282-294 in: T. H. Kunz and P. A. Racey (ed.). Bat biology and conservation. Washington, Smithsonian Institution Press.

Nowak, R. 1994. Walker´s Bats of the World. Baltimore and London, The Johns Hopkins University Press. 287 p.

Pinto, C. M., J. P. Carrera, H. Mantilla-Meluk, and R. J. Baker. 2007. Mammalia, Chiroptera, Phyllostomidae, *Diaemus youngi*: First confirmed record for Ecuador and observations of its presence in museum collections. Check List 3(3): 244-247.

Simmons, N. B. and R. S. Voss. 1998. The mammals of Paracou, French Guiana: a Neotropical lowland rainforest. Part I. Bats. Bulletin of the American Museum of Natural History, New York. 219 p.

Straube, F. C. and G. V. Bianconi. 2002. Sobre a grandeza e a unidade utilizada para estimar esforço de captura com utilização de redes-de-neblina. Chiroptera Neotropical 8(1-2): 150–152.

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